



# ICAO ENGINE EXHAUST EMISSIONS DATA SHEET

## SUBSONIC ENGINES

ENGINE IDENTIFICATION: CF6-6D1A BYPASS RATIO: 5.9  
 UNIQUE ID NUMBER: 1GE002 PRESSURE RATIO ( $\pi_{00}$ ): 25.4  
 COMBUSTOR:  
 ENGINE TYPE: TF RATED THRUST ( $F_{00}$ ) (kN): 181.9

### REGULATORY DATA

CHARACTERISTIC VALUE:	HC	CO	NO <sub>x</sub>	SMOKE NUMBER
D <sub>p</sub> /F <sub>00</sub> (g/kN) or SN	34.1	87.1	71.6	
AS % OF ORIGINAL LIMIT	173.9	73.8	78.9	
AS % OF CAEP/2 LIMIT (NO <sub>x</sub> )			98.6	
AS % OF CAEP/4 LIMIT (NO <sub>x</sub> )			120.1	
AS % OF CAEP/6 LIMIT (NO <sub>x</sub> )			136.5	
AS % OF CAEP/8 LIMIT (NO <sub>x</sub> )			164.1	

### DATA STATUS

x PRE-REGULATION  
 - CERTIFICATION  
 x REVISED (SEE REMARKS)

### TEST ENGINE STATUS

x NEWLY MANUFACTURED ENGINES  
 - DEDICATED ENGINES TO PRODUCTION STANDARD  
 - OTHER (SEE REMARKS)

### EMISSIONS STATUS

x DATA CORRECTED TO REFERENCE  
 (ANNEX 16 VOLUME II)

### CURRENT ENGINE STATUS

(IN PRODUCTION, IN SERVICE UNLESS OTHERWISE NOTED)  
 x OUT OF PRODUCTION (DATE: - )  
 - OUT OF SERVICE (DATE: - )

### MEASURED DATA

MODE	POWER SETTING (%F <sub>00</sub> )	TIME (minutes)	FUEL FLOW (kg/s)	EMISSIONS INDICES (g/kg)			SMOKE NUMBER
				HC	CO	NO <sub>x</sub>	
TAKE-OFF	100	0.7	1.812	0.30	0.50	41.60	4.0
CLIMB OUT	85	2.2	1.502	0.30	0.50	33.90	3.0
APPROACH	30	4.0	0.494	0.60	5.50	11.80	3.0
IDLE	7	26.0	0.176	19.90	52.00	4.60	4.0
LTO TOTAL FUEL (kg) or EMISSIONS (g)			667	5617	15066	12549	-
NUMBER OF ENGINES				7	7	7	7
NUMBER OF TESTS				7	7	7	7
AVERAGE D <sub>p</sub> /F <sub>00</sub> (g/kN) or AVERAGE SN (MAX)				30.9	82.8	69.0	
SIGMA (D <sub>p</sub> /F <sub>00</sub> in g/kN, or SN)				3.5	6.9	2.3	2.2
RANGE (D <sub>p</sub> /F <sub>00</sub> in g/kN, or SN)							

### ACCESSORY LOADS

POWER EXTRACTION 0 (kW) AT - POWER SETTINGS  
 STAGE BLEED 0 (% CORE FLOW) AT - POWER SETTINGS

### ATMOSPHERIC CONDITIONS

BAROMETER (kPa)	99.2-100.5
TEMPERATURE (K)	280-301
ABS HUMIDITY (kg/kg)	0.003-0.015

### FUEL

SPEC	Jet A
H/C	1.93
AROM (%)	18.7

MANUFACTURER: General Electric Company  
 TEST ORGANIZATION: Production Engine Test  
 TEST LOCATION: Production Test Cells M34 & M35  
 TEST DATES: 16/08/1979-19/11/1979

### REMARKS

1. Ref Report no FAA-EE-80-27 (GE Report R80AEG420)

Compliance with Fuel Venting requirements: - ('x' if complies, 'PR' if pre-regulation, '-' if information is not available)